

ABSTRACT

A modular infrastructure for a computer server rack, comprising modular server chassis, each chassis configured to receive a plurality of servers and two network switches. The switches are redundantly coupled to each server in the same chassis via point to point links within a data backplane. The rack further comprises redundant AC to DC power supplies configured to transmit power to a power backplane in each of the server chassis through a power bus bar. DC power is provided by both power supplies to each server in the rack through the power bus bar and a power backplane located in the same chassis. Each power supply is sufficient to power the entire rack. Servers within separate chassis are coupled into the same network by merely daisy chaining the switches in the rack. Individual servers are deployed by sliding the servers into a server chassis to engage connectors in the backplanes.